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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,194	11/26/2003	CHIN-LIANG WANG	11905-US-PA	1193
31561 7590 07/10/2007 JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			EXAMINER DANG, HUNG Q	
			ART UNIT 2621	PAPER NUMBER
			NOTIFICATION DATE 07/10/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

# Office Action Summary

Application No.

10/707,194

Applicant(s)

WANG ET AL.

Examiner

Hung Q. Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Objections*

Claims 6, 10, and 15 are objected to because of the following informalities:  
Claims 6 and 15 recite "saidstarter", which should be "said starter". Claim 10 recites "couple", which should be "coupled."

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*TTG 6/24/07*  
*1-6, 9-15, and 18*  
**Claims ~~1-2, 4-6, 9-11, 13-15, and 18~~ are rejected under 35 U.S.C. 103(a) as**

**being unpatentable over Xilinx's Application Note XAPP328: CoolRunner: Design of an MP3 Portable Player Using a CoolRunner CPLD (attached herein) and Muzaffer et al. (US 2003/0223736).**

Regarding claim 1, Xilinx's Application Note XAPP328 discloses an integrated control chip with a power control for an MP3 player (p.1, section "MP3 Portable Player Block Diagram"; "Power Management" in Fig. 1), said MP3 player including an MP3 system ("MP3 Decoder MAS3507D" in Fig. 1), a power control circuit ("Power

Management" in Fig. 1) and a LCD ("LCD Display" in Fig. 1), said chip comprising: an MP3 interface between said MP3 system and said integrated control chip (Fig. 19), said MP3 interface sending a starting data to said integrated control chip ("start\_adr[15:0]" from "Detect Song Start" to "Song Flash Addr Counter" in Fig. 19; "song\_start" from "Detect Song Start" to "Starting Addr Flash Addr Counter" in Fig. 19); an LCD drive circuit, coupled to said MP3 interface, driving said LCD (Fig. 33; Fig. 37); an external control signal receiver receiving an external control signal (p.37, section "ON/OFF Logic"); a starter control circuit, coupled to said external control signal receiver, determining whether said power control circuit turns on said MP3 player based on said external control signal (p.3, section "ON/OFF"; p.37, section "ON/OFF Logic"; p.39, section "Reset Control Logic"); and a memory device, coupled to said MP3 interface and said starter control circuit, storing said starting data so that said starter control circuit reads said starting data ("Starting Addr Flash Addr Counter" in Fig. 19).

However, Xilinx's Application Note XAPP328 does not disclose a DVD player with an MPEG system or an MPEG interface. Also, instead of using a VFD for display, Xilinx Application Note XAPP328 discloses an LCD to display track number and various icons (Fig. 32).

Muzaffer et al. disclose a DVD player with an MPEG system, an MPEG interface, and a VFD for display (abstract; [0028]; [0032]; Fig. 2; [0030]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the DVD player with an MPEG system, an MPEG interface, and a VFD disclosed by Muzaffer et al. into the integrated control chip

disclosed by Xilinx's Application Note XAPP328 to expand the integrated control chip to video application; hence, enhance the user interface of the system.

Regarding claim 2, Xilinx's Application Note XAPP328 also discloses an external starting data interface ("Song Flash and Starting Address Flash Control" in Fig. 19) coupled to a starting data provider ("8Mbit Starting Addr Flash" in Fig. 19), said memory device reading said starting data defined by an external source via said external starting data interface ("Starting Addr Flash Addr Counter" reads starting data defined by "8Mbit Starting Addr Flash" via "Song Flash and Starting Address Flash Control" in Fig. 19; also see p. 21, section "CoolRunner CPLD Flash Control Logic").

Regarding claim 3, Xilinx's Application Note XAPP328 discloses when said memory device is not stored with said starting data, said memory device reads said starting data provided by said starting data provider via said external starting data interface and stores said starting data provided by said starting data provider (p.8, section "Rewind"; p.9, section "Fast Forward" – when a REW or FWD button is pressed, the starting address of the previous or next song is not stored in the "Flash address counter", which is the memory device, this starting address is read from the "Starting Addr Flash" in Fig. 10, and loaded or stored in the "Flash address counter"), and when said starting data is not read by said memory device through said external starting data interface in a predetermined period, said memory device reads said starting data provided by said MPEG system and stores said starting data provided by said MPEG system (p.23, section "Download Interface Logic" – when in "Download" mode, the starting data, which is the starting address is not read from Starting Addr Flash memory

for a predetermined period equal to download time, instead, the starting data is read from the MPEG system, in this case, from a PC via parallel port, as shown in Fig. 1: MP3 data is transferred from PC Parallel port to the Parallel port interface implemented in the integrated control chip; the starting addresses are then stored in the Starting Addr Flash memory).

Regarding claim 4, Xilinx's Application Note XAPP328 discloses said starting data provider is an EEPROM ("Starting Addr Flash" in Fig. 10, which is a flash memory, which in turn is an EEPROM – electrically erasable programmable ROM; p.3, section "Flash").

Regarding claim 5, Xilinx's Application Note XAPP328 also disclose said external control signal receiver receives an external control signal from an external controller and sends said external control signal to said starter control circuit and said MPEG interface (p.39, section "CoolRunner CPLD Power Management Logic").

Regarding claim 6, Xilinx's Application Note XAPP328 discloses said starter control circuit controls said power control circuit in response to said starting data stored in said memory device and said external control signal (p.8, lines 1-3; Fig. 6; p.39, section "CoolRunner CPLD Power Management Logic").

Regarding claim 9, Xilinx's Application Note XAPP328 also discloses said starter control circuit comprises a logic circuit (p.39, section CoolRunner CPLD Power Management Logic").

Regarding claim 10, Xilinx's Application Note XAPP328 discloses an integrated control chip with power control for a DVD player (p.1, section "MP3 Portable Player

Block Diagram"; "Power Management" in Fig. 1), said MP3 player including a power control circuit ("Power Management" in Fig. 1; p.39, section CoolRunner CPLD Power Management Logic"); and an external controller (p.39, section "CoolRunner CPLD Power Management Logic"), said chip comprising: an external control signal receiver receiving an external control signal from said external controller (p.39, section "CoolRunner CPLD Power Management Logic"); a starter control circuit, coupled to said external control signal receiver, determining whether said power control circuit turns on said MP3 player based on said external control signal (p.39, section "CoolRunner CPLD Power Management Logic"); an MP3 interface between an MP3 system and an integrated control chip (Fig. 19), said MP3 interface sending a starting data to said integrated control chip ("start\_adr[15:0]" from "Detect Song Start" to "Song Flash Addr Counter" in Fig. 19; "song\_start" from "Detect Song Start" to "Starting Addr Flash Addr Counter" in Fig. 19); a memory device coupled to said MP3 interface and said starter control circuit, storing said starting data so that said MP3 interface reads said starting data ("Starting Addr Flash Addr Counter" in Fig. 19); and an external starting data interface ("Song Flash and Starting Address Flash Control" in Fig. 19) coupled to a starting data provider ("8Mbit Starting Addr Flash" in Fig. 19), said memory device reading said starting data defined by an external source via said external starting data interface ("Starting Addr Flash Addr Counter" reads starting data defined by "8Mbit Starting Addr Flash" via "Song Flash and Starting Address Flash Control" in Fig. 19; also see p. 21, section "CoolRunner CPLD Flash Control Logic").

However, Xilinx's Application Note XAPP328 does not disclose a DVD player with an MPEG system or an MPEG interface.

Muzaffer et al. disclose a DVD player with an MPEG system and an MPEG interface. (abstract; [0028]; [0032]; and Fig. 2).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the DVD player with an MPEG system, an MPEG interface, and a VFD disclosed by Muzaffer et al. into the integrated control chip disclosed by Xilinx's Application Note XAPP328 to expand the integrated control chip to video application; hence, enhance the user interface of the system.

Regarding claim 11, Xilinx's Application Note XAPP328 also discloses a display drive circuit (Fig. 33). However, Xilinx's Application Note XAPP328 does not disclose a VFD. Muzaffer et al. disclose a VFD for display (Fig. 2; [0030]). One of ordinary skill in the art would have been motivated to incorporate the VFD disclosed by Muzaffer et al. into the integrated control chip disclosed in Xilinx's Application Note XAPP328 to display the video images instead of using a simple LCD which displays only icons and track numbers.

Claim 12 is rejected for the same reason as discussed in claim 3 above in further consideration of Xilinx's Application Note XAPP328 also disclosing said DVD player enters into a standby mode (p.25, section "Command State Machine" – the DVD player enters a standby mode by disabling the MP3 decoder chip MAS3507D).

Claim 13 is rejected for the same reason as discussed in claim 4 above.

Claim 14 is rejected for the same reason as discussed in claim 5 above.



Claim 15 is rejected for the same reason as discussed in claim 6 above.

Claim 18 is rejected for the same reason as discussed in claim 9 above.

**Claims 7-8 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xilinx's Application Note XAPP328: CoolRunner: Design of an MP3 Portable Player Using a CoolRunner CPLD (attached herein) and Muzaffer et al. (US 2003/0223736) as applied to claims 1-2, 4-6, 9-11, 13-15, and 18 above, and further in view of Kuznetsov et al. (US 2004/0103443).**

Regarding claim 7, see the teachings of Xilinx's Application Note XAPP328 and Muzaffer et al. as discussed in claim 5 above. Furthermore, Xilinx's Application Note XAPP328 also discloses said external controller comprises: a keyboard allowing a user to input said external control signal (Fig. 32). However, the proposed combination of Xilinx's Application Note XAPP328 and Muzaffer et al. does not disclose a remote controller inputting said external control signal via an infrared ray signal.

Kuznetsov et al. disclose a remote controller inputting said external control signal via an infrared ray signal (Fig. 1; [0020]; [0021]; [0022]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the remote controller disclosed by Kuznetsov et al. into being used with the integrated control chip disclosed by Xilinx's Application Note XAPP328 and Muzaffer et al. to allow users input commands from a remote location. The incorporated feature would make the device more convenient to users hence enhance user interface of the device.

Regarding claim 8, Xilinx's Application Note XAPP328 also discloses said external control signal receiver comprises: a keyboard detector detecting signals sent by said keyboard (Fig. 33) while Kuznetsov et al. also disclose and an infrared ray receiver receiving said infrared ray signal sent by said remote controller (Fig. 1; [0020]; [0021]; and [0022]).

Claim 16 is rejected for the same reason as discussed in claim 7 above.

Claim 17 is rejected for the same reason as discussed in claim 8 above.

### ***Conclusion***

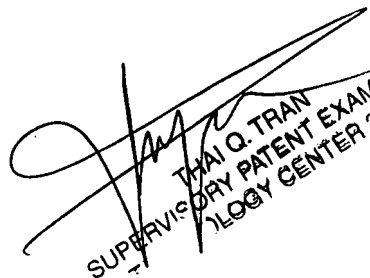
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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